



Sequence Listing-10-806419
SEQUENCE LISTING

<110> Papathanassiou, Adonia

<120> Compositions and Methods for Inhibiting Angiogenesis

<130> A8448

<150> 09/935,145

<151> 2001-08-22

<150> 60/227,152

<151> 2000-08-22

<160> 23

<170> PatentIn version 3.3

<210> 1

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 1

Phe Gly Lys Arg Glu Gln Ala Glu Glu Glu Arg Tyr Phe Arg Ala Gln
1 5 10 15

Ser Arg Glu Gln Leu Ala Ala Leu
20

<210> 2

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 2

Phe Gly Lys Arg Glu Gln Ala Glu Glu Glu Arg Tyr Phe Arg Ala Arg
1 5 10 15

Ala Lys Glu Gln Leu Ala Ala Leu
20

<210> 3

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<400> 3

Phe Val Lys Arg Glu Arg Ala Thr Glu Asp Phe Phe Val Arg Gln Arg
1 5 10 15

SequenceListing-10-806419

Glu Lys Glu Gln Leu Arg His Leu
20

<210> 4
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 4

Gly Met Asp Glu Leu Ser Glu Glu Asp Lys Leu Thr Val Ser Arg Ala
1 5 10 15

Arg Lys Ile Gln Arg Phe
20

<210> 5
<211> 81
<212> PRT
<213> Homo sapiens

<400> 5

Gly Ser Asp Gln Ser Glu Asn Val Asp Arg Gly Ala Gly Ser Ile Arg
1 5 10 15

Glu Ala Gly Gly Ala Phe Gly Lys Arg Glu Gln Ala Glu Glu Glu Arg
20 25 30

Tyr Phe Arg Ala Gln Ser Arg Glu Gln Leu Ala Ala Leu Lys Lys His
35 40 45

His Glu Glu Glu Ile Val His His Lys Lys Glu Ile Glu Arg Leu Gln
50 55 60

Lys Glu Ile Glu Arg His Lys Gln Lys Ile Lys Met Leu Lys His Asp
65 70 75 80

Asp

<210> 6
<211> 539
<212> PRT
<213> Homo sapiens

<400> 6

Met Thr Ser Leu Trp Gly Lys Gly Thr Gly Cys Lys Leu Phe Lys Phe
1 5 10 15

SequenceListing-10-806419

Arg Val Ala Ala Ala Pro Ala Ser Gly Ala Leu Arg Arg Leu Thr Pro

20

25

30

Ser Ala Ser Leu Pro Pro Ala Gln Leu Leu Leu Arg Ala Val Arg Arg

35

40

45

Arg Ser His Pro Val Arg Asp Tyr Ala Ala Gln Thr Ser Pro Ser Pro

50

55

60

Lys Ala Gly Ala Ala Thr Gly Arg Ile Val Ala Val Ile Gly Ala Val

65

70

75

80

Val Asp Val Gln Phe Asp Glu Gly Leu Pro Pro Ile Leu Asn Ala Leu

85

90

95

Glu Val Gln Gly Arg Glu Thr Arg Leu Val Leu Glu Val Ala Gln His

100

105

110

Leu Gly Glu Ser Thr Val Arg Thr Ile Ala Met Asp Gly Thr Glu Gly

115

120

125

Leu Val Arg Gly Gln Lys Val Leu Asp Ser Gly Ala Pro Ile Lys Ile

130

135

140

Pro Val Gly Pro Glu Thr Leu Gly Arg Ile Met Asn Val Ile Gly Glu

145

150

155

160

Pro Ile Asp Glu Arg Gly Pro Ile Lys Thr Lys Gln Phe Ala Pro Ile

165

170

175

His Ala Glu Ala Pro Glu Phe Met Glu Met Ser Val Glu Gln Glu Ile

180

185

190

Leu Val Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro Tyr Ala Lys

195

200

205

Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly Lys Thr Val

210

215

220

Leu Ile Met Glu Leu Ile Asn Asn Val Ala Lys Ala His Gly Gly Tyr

225

230

235

240

Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly Asn Asp Leu

245

250

255

Tyr His Glu Met Ile Glu Ser Gly Val Ile Asn Leu Lys Asp Ala Thr

260

265

270

Ser Lys Val Ala Leu Val Tyr Gly Gln Met Asn Gln Pro Pro Gly Ala

275

280

285

SequenceListing-10-806419

Arg Ala Arg Val Ala Leu Thr Gly Leu Thr Val Ala Glu Tyr Phe Arg
290 295 300

Asp Gln Glu Gly Gln Asp Val Leu Leu Phe Ile Asp Asn Ile Phe Arg
305 310 315 320

Phe Thr Gln Ala Gly Ser Glu Val Ser Ala Leu Leu Gly Arg Ile Pro
325 330 335

Ser Ala Val Gly Tyr Gln Pro Thr Leu Ala Thr Asp Met Gly Thr Met
340 345 350

Gln Glu Arg Ile Thr Thr Lys Lys Gly Ser Ile Thr Ser Val Gln
355 360 365

Ala Ile Tyr Val Pro Ala Asp Asp Leu Thr Asp Pro Ala Pro Ala Thr
370 375 380

Thr Phe Ala His Leu Asp Ala Thr Thr Val Leu Ser Arg Ala Ile Ala
385 390 395 400

Glu Leu Gly Ile Tyr Pro Ala Val Asp Pro Leu Asp Ser Thr Ser Arg
405 410 415

Ile Met Asp Pro Asn Ile Val Gly Ser Glu His Tyr Asp Val Ala Arg
420 425 430

Gly Val Gln Lys Ile Leu Gln Asp Tyr Lys Ser Leu Gln Asp Ile Ile
435 440 445

Ala Ile Leu Gly Met Asp Glu Leu Ser Glu Glu Asp Lys Leu Thr Val
450 455 460

Ser Arg Ala Arg Lys Ile Gln Arg Phe Leu Ser Gln Pro Phe Gln Val
465 470 475 480

Ala Glu Val Phe Thr Gly His Met Gly Lys Leu Val Pro Leu Lys Glu
485 490 495

Thr Ile Lys Gly Phe Gln Gln Ile Leu Ala Gly Glu Tyr Asp His Leu
500 505 510

Pro Glu Gln Ala Phe Tyr Met Val Gly Pro Ile Glu Glu Ala Val Ala
515 520 525

Lys Ala Asp Lys Leu Ala Glu Glu His Ser Ser
530 535

Sequence Listing-10-806419

<210> 7
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 7

Ser Leu Gln Asp Ile Ile Ala Ile Leu Gly Met Asp Glu Leu Ser Glu
1 5 10 15

Glu Asp Lys Leu Thr Cys
20

<210> 8
<211> 378
<212> DNA
<213> Mus musculus

<400> 8
gaattcagg tgaasgtgg tggatctggg ggaggccttag tgaagcctgg agggccctg 60
aaactctcct gtgcagccctc tggattcact ttcagtagct atgcctatgtc ttgggttcgc 120
cagactccag agaagaggct ggagtgggtc gcatccatta gtagtgggtg tagcacctac 180
tatccagaca gtgtgaaggg ccgattcacc atctccagag ataatgccag gaacatcctg 240
tacctgcaaa tgagcagtct gaggtcttag gacacggcca tgtattactg tgcaagaggc 300
ctaccatttg cttactgggg ccaaggact ctggtcactg tctctgcaga gagtcagtcc 360
ttcccaaatg tcagatct 378

<210> 9
<211> 372
<212> DNA
<213> Mus musculus

<400> 9
gagctcgata ttgtgatgac acaatctaca gcttccttag ctgtatctct gggcagagg 60
gccaccatct catgcagggc cagccaaagt gtcagtagat ctagctatag ttatatgcac 120
tggtaccaac agaaaccagg acagccaccc aaactcctca tcaagtatgc atccaaccta 180
gaatctgggg tccctgccag gttcagtgcc agtgggtctg ggacagactt caccctcaac 240
atccatcctg tggaggagga ggatactgca acatattact gtcagcacag ttggagatt 300
ccgctcacgt tcggtgctgg gaccaagctg gagctgaaac gggctgatgc tgcaccaact 360
gtatccgcat gc 372

<210> 10
<211> 32
<212> DNA
<213> Artificial Sequence

<220>

SequenceListing-10-806419

<223> PCR primer

<220>
<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t

<400> 10
cttccggaat tcsargtnma gctgsagsag tc

32

<210> 11
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<220>
<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t

<400> 11
cttccggaat tcsargtnma gctgsagsag tcwgg

35

<210> 12
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 12
cctccggaat tccaggttac tctgaaagwg tstg

34

<210> 13
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 13
cttccggaat tcgaggtcca rctgcaacar tc

32

<210> 14
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 14
cttccggaat tccaggtcca actvcagcar cc

32

Sequence Listing-10-806419

<210> 15
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 15
cttccgaaat tcgaggtgaa sstgggtggaa tc 32

<210> 16
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 16
cttccgaaat tcgatgtgaa cttggaaatgt tc 32

<210> 17
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 17
ggaagatctg acatttggaa aggactgact ctc 33

<210> 18
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 18
gggagctcga yattgtgmts acmcarwctm ca 32

<210> 19
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 19
ggtgcatgctgatacagttgtgcagcatc 30

<210> 20
<211> 122
<212> PRT
<213> Mus musculus

SequenceListing-10-806419

<220>
<221> misc_feature
<222> (3)..(3)
<223> Xaa can be any naturally occurring amino acid

<400> 20

Glu Val Xaa Val Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15

Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val
35 40 45

Ala Ser Ile Ser Ser Gly Gly Ser Thr Tyr Tyr Pro Asp Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ile Leu Tyr Leu
65 70 75 80

Gln Met Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala
85 90 95

Arg Gly Leu Pro Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
100 105 110

Ser Ala Glu Ser Gln Ser Phe Pro Asn Val
115 120

<210> 21
<211> 120
<212> PRT
<213> Mus musculus

<400> 21

Asp Ile Val Met Thr Gln Ser Thr Ala Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Gln Ser Val Ser Thr Ser
20 25 30

Ser Tyr Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Lys Leu Leu Ile Lys Tyr Ala Ser Asn Leu Glu Ser Gly Val Pro Ala
50 55 60

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His
65 70 75 80

SequenceListing-10-806419

Pro Val Glu Glu Glu Asp Thr Ala Thr Tyr Tyr Cys Gln His Ser Trp
85 90 95

Glu Ile Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg
100 105 110

Ala Asp Ala Ala Pro Thr Val Ser
115 120

<210> 22

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Chemically synthesized synthetic peptide

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> X1 is a positively charged amino acid

<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> X2 is a positively charged amino acid

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> X3 is a negatively charged amino acid

<220>

<221> MISC_FEATURE

<222> (4)..(4)

<223> X4 is 2-3 of any amino acid

<220>

<221> MISC_FEATURE~

<222> (5)..(5)

<223> X5 is 2-3 negatively charged amino acids

<220>

<221> MISC_FEATURE

<222> (6)..(6)

<223> X6 is a positively charged amino acid

<220>

<221> MISC_FEATURE

<222> (7)..(7)

<223> X7 is 3-4 of any amino acid

<220>

<221> MISC_FEATURE

<222> (8)..(8)

<223> X8 is a positively charged amino acid

<220>

<221> MISC_FEATURE

<222> (9)..(9)

<223> X9 is any amino acid

SequenceListing-10-806419

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X10 is a positively charged amino acid

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> X11 is any amino acid

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> X12 is a positively charged amino acid

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> X13 is any amino acid

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> X14 is a negatively charged amino acid

<400> 22

Xaa
1 5 10

<210> 23
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Chemically synthesized synthetic peptide

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> X1 is a negatively charged amino acid

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> X2 is a negatively charged amino acid

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X3 is a negatively charged amino acid

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> X4 is a positively charged amino acid

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> X5 is any amino acid

<220>

SequenceListing-10-806419

```
<221> MISC_FEATURE
<222> (6)..(6)
<223> X6 is any amino acid

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> X7 is any amino acid

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> X8 is any amino acid

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> X9 is a positively charged amino acid

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X10 is any amino acid

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> X11 is a positively charged amino acid

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> X12 is a positively charged amino acid

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> X13 is any amino acid

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> X14 is any amino acid

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> X15 is a positively charged amino acid

<400> 23

Xaa Xaa
1 5 10 15
```